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Director, Foreign Broadcas	st			DATE 2 September 1986
Information Service TO: (Officer designation, room number, and building)	D.	ATE	OFFICER'S	COMMENTS (Number each comment to show from whole to whom. Draw a line across column after each comment
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Deputy Director for Science and Technology Room 6E45 - Headquarters				
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3. Intelligence Community Staff ATTENTION: Program and				
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FBIS-1012/86 2 SEP 1986

	ATTENTION:	Program and Budget Staf	f	
	VIA:	Deputy Director for Sci	ence and Technolo	gу
STAT	FROM:	Director, Foreign Broad	cast Information	Service
STAT	SUBJECT:	Exceptional Intelligence Recommendation -	a Analyst Program	ı
STAT	1. I recom	mend	for the Exception	onal Analyst
STAT	Program. During	his career with FBIS,	has bee	n an outstanding
	analyst of China	and of Sino-Soviet and	Sino-American aff	airs. He is
	widely recognize	d in the Intelligence Co	mmunity and acade	mia as an
	authority in the	se fields as well as in	the methodology o	of media
	•	trong linguistic capabil		
	·	ces in Chinese, Japanese		
STAT	2. The top	ic has chosen	for his project	will draw on his
	various talents	and experience in order	to address a cruc	ial issue facing
	the communist co	untries. This issueho	w a communist sys	tem can
	reconcile the de	mands of modernization w	ith the constrain	its of political
	control of intel	lectual activityis alr	eady a live one i	n China as that

MEMORANDUM FOR: Intelligence Community Staff

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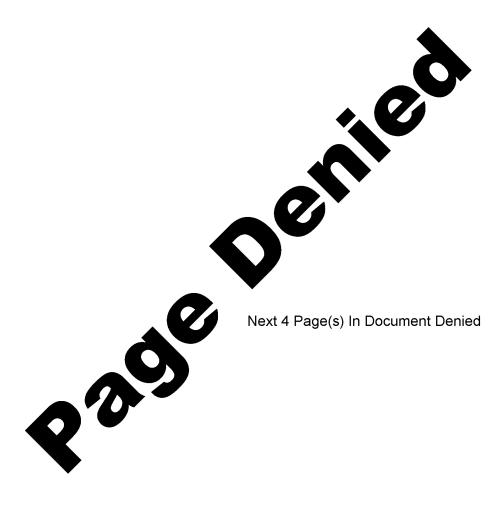
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country wrestles with its ambitious modernization program. It also
promises to arise in acute form in the Soviet Union as the Gorbachev
regime pursues the reform agenda it is now formulating. I can think of
no one as qualified as to address this basic issue.
3. I expect that work on this issue will have great
value in the Intelligence Community (and, I might add, make an important
contribution to the broader foreign affairs and academic world). I
therefore urge you to approve his application for the Exceptional Analyst
Program.
Attachments: A. Personal History
B. Professional Career C. FBIS Career Plans for Applicant
D. Proposed Program
CONCUR:
Deputy Director for Science and Technology Date

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(D) PROPOSED PROGRAM

Summary

I propose a two-year project to examine the difficulties communist parties have in controlling fields of intellectual activity that are critical to success of modernization. Increasingly, states committed to Marxist-Leninist ideologies are unable to harmonize the premises of their political doctrines with conclusions from the modern natural and social sciences that are antithetical to Marxism but which they must nevertheless promote to compete in the modern world. Ultimately, these regimes face the critical dilemma of having to choose between loosening long-imposed bonds on intellectual activity at the expense of political control, or, for the sake of maintaining political control, constraining the development of modern science and technology necessary for their competitive position and security in the modern world. Either of these alternatives has lasting consequences. Understanding the nature of the dilemma is therefore of major importance to the Intelligence Community.

For a concrete example of this dilemma, the project will focus on the efforts to reform China's communist system promoted by Deng Xiaoping since the late 1970's. I will investigate the efforts of the Chinese Communist Party to define a boundary between tolerated intellectual diversity and forbidden ideological deviation so that it can establish modern disciplines of natural and social science inquiry as a necessary part of modernization, on one hand, and preserve the intellectual validity of Marxism-Leninism as the regime's legitimating political ideology, on the other.

Because the dilemma is systemic in nature, all communist regimes face the potentially revolutionary challenges it presents in one degree or another. Accordingly, the project will explore parallel experiences in other communist countries, and especially in the Soviet Union.

* * *

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Proposal

I propose to spend two years, from April 1987 to March 1989, examining the course of intellectual reform in the natural and social sciences in China as an example of the dilemma of intellectual modernization facing the communist world in general. The project will trace the evolution of China's burgeoning intellectual establishment, analyze the dynamics and limits of intellectual reform and its impact on China's Marxist political ideology, and evaluate the significance of all these issues for China's policy making processes.

This examination will draw on the flood of Chinese technical and scholarly publications that have become available openly since 1978, on discussions with authorities in the Intelligence Community and in academe who have studied particular aspects of intellectual reform in China in recent years, and, to the extent possible, on interviews with Chinese natural and social scientists themselves.

By way of comparison, the project will examine parallel issues as they have emerged in the USSR and Eastern Europe. The Soviet experience is particularly rich for comparative purposes, both because of the USSR's longer history and more advanced development, and because the Soviets are themselves beginning to discuss new reforms of their own system. This part of the project will draw on primary Soviet publications, on the expertise of academic and Community authorities in this country, on the small body of pathbreaking secondary literature on the subject, and as far as possible, on interviews with Soviet natural and social scientists in the USSR.

The project will culminate in a book-length report, a shorter precis of the book's analysis and conclusions, and a methodological key to help understand future episodes of political debate on intellectual reform in China and other communist countries. I believe that all of these will prove of value to the Intelligence Community in seeking to understand the dynamics and implications of the oscillating periods of "freezing" and "thaw" in intellectual activity both in China and elsewhere in the communist world.

The Problem

Though virtually all intellectual disciplines have traditionally been ideologically sensitive in communist countries, the implications of the natural and social sciences have been notoriously acute. This is because these disciplines govern

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knowledge and ideas that are integrally part and parcel of successful modernization and at the same time present inherent challenges to the intellectual tenets and assumptions of Marxism-Leninism. Because Marxism-Leninism as the "science" of human affairs claims to be consistent with the sciences, leaders and party theoreticians in the communist countries have sought to accommodate the tenets and findings of the modern sciences in at least three ways:

- o by distorting those aspects of the modern sciences that conflict with or raise questions about Marxism's premises;
- o by modifying the tenets of Marxism itself; or
- o by ignoring or obscuring the contradictions between the two.

There has been ample evidence of all three types of behavior in China's scholarly, technical, and theoretical journals in recent years. The recurring political debates over seemingly obscure academic issues in China underscore the difficulties that the reformers associated with Deng Xiaoping have had in promoting broader and deeper intellectual inquiry in these modern disciplines without undermining the legitimacy of the regime's political doctrines.

There have been, for example, heated debates over the need to move beyond the 19th and early 20th century framework of Marx, Engels and Lenin and establish a new "Marxism-Leninism with Chinese characteristics." These debates reflect, in part, efforts by the PRC's party theoreticians to assimilate 20th century natural and social scientific ideas--ranging from relativity and quantum mechanics in physics to genetics and sociobiology in the life sciences to Keynesian economics to the humanistic existentialism of Sartre.

At the same time, there has also been an evident readiness to disavow the findings of scientists in the West in some areas. Some journal articles, for example, have gone to particular lengths to raise questions about experimental results that support the probablistic Copenhagen school interpretations of quantum mechanics, favoring instead deterministic "hidden variable" interpretations that are more consistent with the determinism of Marxism. With respect to other intellectual disciplines, like Freudian psychology, there appears to be a schizophrenic readiness to accept the practical utility of some theories while rejecting their theoretical basis and implications for politics and society.

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The costs of all of these responses to the dilemma are high. The erection of what Chinese intellectuals call "forbidden zones" around some areas of intellectual inquiry blunts the regime's modernization programs by crippling true research and alienating scientists and intellectuals in critical disciplines from the regime's goals. Conversely, liberalization of the guidelines for intellectual inquiry opens the door to challenges to the intellectual validity of the regime's ideology, raises questions about the Chinese Communist Party's claim to authority, and so enhances disaffection within the party's ranks. The consequence of this dynamic has been that intellectual debates have frequently become political controversies.

China's party leadership has vacillated between equally self-defeating alternatives of intervention in intellectual affairs to prescribe boundaries on legitimate inquiry on one hand and reassurances of intellectual freedom on the other. The notorious campaign against "spiritual pollution" of 1983-1984 and the pronouncement of a new, lasting "hundred flowers" era earlier this year exemplify the two extremes of this cycle.

The impact of this cycle on the program of reforms sponsored by Deng Xiaoping has been plain. The dramatic changes in China's economic and social life brought about by Deng's reforms obscure an underlying pattern of twists and turns in party attitudes toward some intellectual and social products of the reforms. These shifts in party attitude in turn have undermined confidence in the reforms among the party rank and file, intellectuals, and the populace at large. If the experience of reform in other communist countries is any guide, failure by the Chinese Communist Party to resolve this cycle in favor of free intellectual inquiry on behalf of national goals will ultimately doom the reforms.

This cycle of freezing and thaw in intellectual activity has taken a discernible toll elsewhere in the communist world. Even though the sciences have commanded heavy emphasis in the Soviet educational system and the USSR has claimed world-class achievements in some areas, many fields of science in the USSR lag considerably behind the West. There are many reasons for this lag, such as excessive bureaucratic control and intervention, an excessive emphasis on applied over basic sciences, and the effects of relying on reverse engineering of Western technology as a means to modernize. One of the most important reasons, however, is that there are political disincentives to pursuing innovative research in areas that are subversive to the regime's ideological doctrines.

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Approach and Results of the Project

The project will consist of four main components:

- (1) A survey of the growth of China's intellectual establishment. This would focus mainly on the Academy of Sciences and the Academy of Social Sciences, reviewing the elaboration of the institutes within them and assessing as far as possible their interaction with China's party and state structures.
- (2) A detailed examination of the Chinese approach to disciplines that appear to offer conclusions potentially threatening to the tenets of Marxism-Leninism:
 - Modern sciences: quantum theory, relativity, statistical physics, and cosmology; modern biology, including molecular and evolutionary biology; psychology, cognitive science, and cybernetics.
 - Social sciences: economics, political science, sociology, and anthropology (disciplines that previously were denied existence as avenues of intellectual inquiry independent from Marxist political economy) and the traditionally tolerated disciplines of history and philosophy.
- (3) An analysis of debates among Chinese party and academic theoreticians on what exactly constitutes "Marxism with Chinese characteristics" and what should be preserved from Marx, Engels, Lenin, Stalin and Mao and what should be discarded as obsolete, especially in response to the challenges of the modern natural and social sciences.
- (4) A comparative analysis of these questions in China with their parallel treatment in the Soviet Union. Many of these same issues have been and continue to be controversial in the USSR for many of the same reasons. A substantial body of primary and secondary material exists on the Soviet case for comparison. The purpose of this comparative effort will be not only to provide insights into the specific Chinese example but, more importantly, to serve as a springboard to understanding the aspects of the problem that are common to all communist countries.

The project would produce three reports:

 A booklength analysis of these problems, presenting the conclusions and supporting evidence in detail for those in the Community who are interested in understanding them in depth;

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- A precis of the book-length study that will summarize its findings and judgments for a broader readership in the Community; and
- A methodological appendix that will provide Intelligence Community analysts with keys to understanding the dynamics of these critical debates and their implications for politics and policy.

Contribution to Analytical Competence

The project will allow me both to strengthen my expertise in an area that I have long specialized in and to extend it to areas that I have not previously dealt with extensively—Soviet politics and ideological affairs. In doing both of these things, the project will significantly enhance my performance as a senior analyst in the DDS&T, a new position allotted to FBIS Analysis Group to encourage integrative analysis that illuminates questions that cut across the boundaries of the individual communist countries.

With respect to my work on China, I have covered a broad range foreign policy topics in my Agency career, but my specialty has been Chinese domestic politics. With equal measures of fascination and frustration over the years I have watched periods of intellectual liberalization and repression alternate in China. Significant developments, like the campaign against "spiritual pollution" in 1983, have burst into China's leadership politics after a long periods of gestation in China's intellectual circles.

The pressures of current analysis and reporting permitted neither time nor latitude to do more than guess at the implications of such controversies and sniff tentatively at which way the political wind appeared to be blowing. This two-year project will allow me to undertake the intensive research and synthesis necessary to become deeply acquainted with the issues, personalities and dynamics of these intellectual debates, so that I will be able to anticipate them before they evolve into political controversies and to understand the import and implications of new controversies and their possible impact on Chinese development, politics, and policies.

More broadly, the project will afford me the opportunity to begin work on an important question in the political life of other communist states, and especially in the USSR. I anticipate that the understanding I gain from the project concerning parallel controversies in the Soviet Union will be useful in future work on the politics of reform and ideological change in the USSR and Soviet relations with other communist states and parties.

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Finally, the project will allow me to bring to bear in my professional career an expertise that has thus far remained avocational. I spent the greater part of my college years at Princeton working toward an eventual career in theoretical physics. While I ultimately dropped those plans and studied Chinese history instead, I have retained a strong interest in the sciences, following developments in physics, geology, and biology over the years.

Relevance to National Intelligence Needs

How the communist states struggle to modernize, how these states respond to the pressures of competing in the modern world, and how they adapt to what they recognize as a scientific and technological revolution in progress in the rest of the world are questions of paramount and enduring importance to the Intelligence Community. This project offers specific analyses of these issues with respect to the two largest and most powerful communist countries and conclusions of general scope that will shed light on these critical problems elsewhere in the communist world.

With respect to China specifically, the PRC's role in world affairs in general and its relationship to the United States in particular will be shaped decisively by the outcome of the reforms underway under Deng Xiaoping's tutelage. Understanding the goals and limits of these reforms and the political obstacles to their implementation is relevant in both the short and long term to the needs of U.S. policymakers and the Intelligence Community with respect to the PRC.

These same concerns apply with even greater urgency to the USSR. As the new Soviet leadership debates reforms of its own, understanding the political dynamic of intellectual and scientific reform will be criticial to estimating prospects for Soviet success. I believe therefore that this project will contribute to Community analysis of both countries.

Future Plans

After completing this project, I would like to return to my present senior analyst position in FBIS. I would like to build on the insights and conclusions drawn from this project by continuing to work on problems that cut across the national boundaries of the communist countries and affect the communist world generically, while at the same time looking more deeply into intelligence questions concerning both my traditional specialty, Chinese domestic politics, and the contemporary Soviet Union and Eastern Europe.

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Supervising Official

5DUU Headquarters Bldg.

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EXPENSES

FY 1987

Trave:	1
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Trip to California (Palo Alto, Berkeley, and Santa Monica)	\$1250.00
Trip to Boston and New York	950.00
Computer Requirements	
IBM PC Convertible portable computer, with 3.5" external diskette drive for PC and PC Convertible battery charger (for data collection and word-processing needs during	
trips and in libraries)	2450.00
Wang IBM-Emulation software package (to make IBM diskettes compatible with Wang word-processing equipment	1900.00
Equipment	
Tape recorder for interviews	200.00
Tape cassettes	30.00
Clerical	
Xeroxing expenses in libraries	250.00
Supplies	
Printer ribbons, computer diskettes, and paper	120.00
Books and Journals	
Books and subscriptions	1800.00

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FY 1988

Trave.	<u>L</u>	
	Trip to China (Beijing and Shanghai)	\$6150.00
	Trip to California (Palo Alto, Berkeley, and Santa Monica)	1250.00
	Trip to Boston and New York	950.00
	Trip to England (London and Cambridge)	3250.00
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	Xeroxing expenses in libraries	500.00
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	Printer ribbons, computer diskettes and paper	200.00
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	Books and subscriptions	2400.00
	FY 1989	
Trave		
Trave		6450.00
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Trave:	Trip to China (Beijing and Shanghai) Trip to Soviet Union (Moscow and Leningrad)	
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Cleric	Trip to China (Beijing and Shanghai) Trip to Soviet Union (Moscow and Leningrad) Cal Xeroxing expenses in libraries	5250.00
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Appendix I:

PROPOSED SCHEDULE OF WORK

April-June 1987:

- Gather materials relevant to project from FBIS and Library of Congress collections.
- Review classical Marxist literature on natural and social sciences.
- Begin research on structure and evolution of Chinese Academy of Science and Academy of Social Sciences.
- Set up next quarter visits to Harvard, MIT, Columbia, Princeton, Stanford, Berkeley and Rand to interview scholars working in relevant fields and gather materials from library collections of PRC materials.
- Begin preparations for fall trip to PRC.

July-September 1987:

- Complete research on structure and evolution of institutes and draft book chapter.
- Begin research on natural sciences sections.
- Conduct interviews and visit libraries in Boston, New York,
 Palo Alto and Santa Monica.
- Complete arrangements for PRC trip.

October-December 1987:

- Conduct interviews in Beijing and Shanghai with institute scholars; gather books and journals.
- Complete research on natural sciences and draft chapters on this section.

January-June 1988:

• Complete research on social science issues and draft chapters on these.

- Set up return visits for following quarter to Boston,
 New York, Palo Alto and Santa Monica.
- Make arrangements for visit to England for interviews at University of London and Cambridge.
- Begin arrangements for fall visits to China and USSR.

July-September 1988:

- Review course of party theoretical disputes on limits of revision of Marxist tenets and draft chapter on this.
- Begin research on Soviet experience for comparative chapter.
- Conduct interviews in Boston, New York, Palo Alto, Santa Monica, London and Cambridge.
- Complete arrangements for China and USSR trips.

October-December 1988:

- Re-interview institute scholars in Beijing and Shanghai.
- Conduct interviews of Soviet scholars on parallel issues.
- Complete research for comparative chapter on Soviet experience and draft.

January-March 1989:

- Assemble and revise drafted chapters.
- Condense precis from overall manuscript.
- Draft methodological appendix.

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Appendix II:

BIBLIOGRAPHY

The project will draw heavily on the broad range of journals published in China, especially from those under the auspices of the Academy of Sciences and Academy of Social Sciences. Many of the materials relevant to the project remain untranslated. FBIS retains large holdings of many of these journals, which I will supplement with from what I can find in collections at the Library of Congress, Harvard University, Columbia University, the Hoover Institution, and Berkeley and with what I can purchase directly in China.

There are, in addition, a number of secondary books and journal articles relevant to the project that I expect to consult at various stages. The following topical bibliography includes some of these by way of illustration.

Classical Marxist Approaches To the Sciences

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